

## ABSTRACT OF THE DISCLOSURE

5 A mechanical force generator for producing an unidirectional force by converting rotational force energy to a directional force by rotating a cage assembly about its longitudinal axis, which then turns a sun gear and planet gears to move opposing eccentrics to vary the radii of the center of mass of the eccentrics to produce a directional force. A timing mechanism is connected to the cage to change the phase relationship between the cage and axis to vary the resultant force output.